

GUIDE FOR WASTE AND ECOLOGICAL FOOTPRINT REDUCTION

Hungarian Association of Environmental Enterprises

The aim of our publication is to help the countries situated at the Danube river water catchment area to achieve cleaner environment and cleaner rivers. The negative effects of our human activities, consumer habits are getting more and more visible: we can no longer go on a hike without seeing the traces of littering and the roadsides are also "paved" with litter heaps. Our riverside areas require more attention as the waste got to the floodplain is carried away and transported far by the water, shredded meanwhile faster than on the fields. Therefore an important aim is to keep our waste away from living waters, prevent waste generation if we can, and if the latter is unavoidable, dispose it to the right place, to the selective collection points. In our publication, you will find lot of tips on what you can do for a cleaner Danube, Tisza or for the river, stream, creek or streamlet you live by.



At first, recognize the contexts. Check each process and identify the points where you can make changes. Sometimes the change means making sacrifice but, in return, we will get the "aha-experience", the feeling when we realize, that the amount of waste is reduced in our selective waste bins, also. Keep the vision of giving our children an opportunity to swim in a clean lake, to water hike on a waste-free river and to drink clean water from the tap.

The good news is that you can also do for this! Use our practices and share the good ones! Who else can do for the change? Children, parents, employees, municipalities, schools, volunteers – practically everybody! Involve as many people as possible! 66

Gergely Hankó, general manager, Hungarian Association of Environmental Enterprises

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Let's start at the beginning!

OVER-CONSUMPTION

The Global Footprint Network (GFN), an international organization calculates the date of the Earth Overshoot Day year by year - by comparing Earth's available yearly bio-capacity with the humanity's ecological footprint, marking the date when we exhaust the ecological resources accessible at the given year.

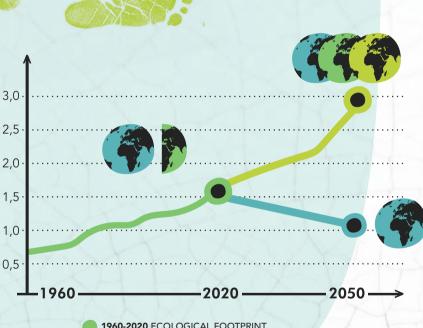


The Earth Overshoot Day fell on 29 July in 2019, while in 2020 fell on 22 August – due to the COVID-19 pandemic and the reduced environmental usage, as a result. So the coronavirus meant three-week less load and consumption for the Earth.

Unfortunately, in 2021 we saw a decline, again reaching the Overshoot Day on 29 July. If we left the carbon-based energy economy we could postpone it by 93 days and by further 13 days, if we could reduce the food waste. If we could improve the results by 5 days every year, by 2050 humanity would not be in deficit.



BUT WHY DO WE NEED A PANDEMIC FOR REDUCTION? We could do it on our own. Learning from this, the restart of the economic systems now offers a unique opportunity for the countries, cities, companies to create a more livable future with re-thinking of our daily lives, so that we consume only as much, as we can afford in every year.



1960-2020 ECOLOGICAL FOOTPRINT 2020-2050 POSSIBLE SCENARIOS WITHOUT CHANGE STARTING A RAPID REDUCTION

BUT WHAT IS THE ECOLOGICAL FOOTPRINT?

This indicator is very illustrative, it's worth getting to know it better! The term "ecological footprint" refers to the amount of land, air and water needed for a society, a country or an individual at a given level of technological development to sustain itself and to absorb the waste it has produced.

This value can be calculated for each individual person, group, region, countries or enterprises, also.



HOW BIG IS YOUR FOOTPRINT?

Countries, with different level of development have different size of footprint. Generally speaking, the developed countries have bigger footprint than the developing ones. Let's check it on an example: the footprint of the United States of America 8 hectares/person, Ethiopia 0.67 hectares/person. The aim is to reach a level of about 1.5 ha per capita in each country, in order to avoid overconsumption and the exploitation of the Earth.

If everyone on the planet would live like an average Hungarian citizen we would need 2.2 Earths...

>> Let's calculate your own footprint! https://www.footprintcalculator.org/



In order to reduce your own footprint, we offer you some useful saving and sustainability tips to see how you can be more careful with the energy, water, materials (i.e. resources) and how you can reduce it even further by being more conscious and responsible.



Reducing your ecological footprint - along to an environmentally friendly and sustainable lifestyle - also leads to saving money therefore allowing you a more joyful and happy life...

> HINT It is worth to ask our grandparents how they lived, how they saved, how they produced less waste. From this viewpoint many things used to work better, the people lived more sustainably, there was not so much wasting, and, in many places there were not even waste bins in the house!

"You must be the change you wish to see in the world." Mahatma Gandhi

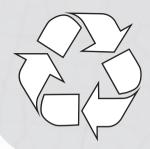
So, always look at yourself at first before blaming others for something. If you want to make changes, start at yourself - look around and act. Someone always has to be first, and trust us, more and more people will follow for a good community cause. We've thematized the possible options so you can just hit the Handbook at the relevant topic whenever you need it.

DROP IN THE OCEAN?!

We tend to think, that if I turn off the water during tooth-brushing it would not save the world. But it can! Every step counts – just think about what if 7 billion people turn off the water? We may feel small, but you have to believe, that every drop counts.

CIRCULARITY

The cycles that exist in nature do not produce unnecessary substances or by-products. The emitted material, by-product of one living organism, is the food and energy source of another living being. This ecosystem has evolved over millions of years and works perfectly to these days.



This cycle, this metabolism is a perfectly closed, circular system that we have been wanting to copy and transplant into the economic processes of our world for so long. The main actors in the system are producers, consumers and decomposers known from the food chains. They ensure the circulation of materials. Human civilization, however, generates and operates processes which have such products and by-products that are unknown in nature: waste and ordinary garbage.

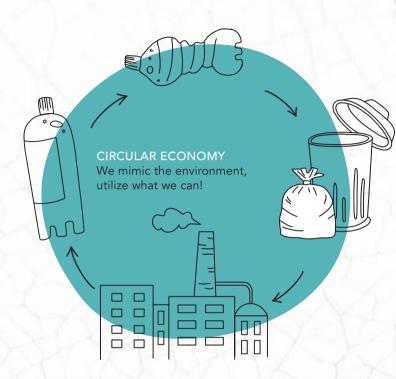
LET'S TAKE AN EXAMPLE, HOW THIS PERFECT CIRCULATION WORKS:

Water circulation: the sunrays heat up the water, causing some of the water droplets to heat up and transform to steam. It is called evaporation. The air, saturated with vapor, cools down at high altitude and forms droplets again, creating clouds. The wind blows these clouds, they "pile up" then "burst" and the rain gets back to the ground. A part of the rainwater moves on the surface, an other part infiltrates into the soil, feeding the plants. The water bodies remaining on the surface join together, making bigger ones and sooner or later they arrive to the oceans.

ENVIRONMENTAL CYCLES

In the environment there is no such thing as waste, everything is part of the natural cycle.

> Just think about, what happens if the water that evaporates is contaminated with not gentle/non-degradable cleaning chemicals? What kind of damage can it cause in the circulation? How many people could be affected by the pollution?



CIRCULAR ECONOMY

The point is that the life cycle of products should be converted into circular (similar to the "Cradle to Cradle" theory). Already at product design and at the production the aspects of repairability, durability and usability must be a priority, thus ensuring that they become waste as late as possible, and once they become waste they will serve as feedstock or raw material of other products. For example, standardizing packaging materials and ensuring its returnability would be one of the most effective steps in the near future!

We can also help the cycle with creative ideas. We can make bags and sacks for ourselves and our friends from the scrap material of a curtain manufacturer company. The scrap from wood industry could be excellent building blocks for children. The coffee capsule can be a beautiful jewelry with a little amendment.

It is worth even thinking about starting a business in this way, because if the scrap material from other companies is our raw material, we can get it at a much favorable price.

VITAL WATERS

Water is not only a vital element, but it is a natural resource that we need to treat more sparingly and wisely.

Don't be fooled by occasional heavy downpours and floods as these – especially nowadays - are a part of climate change. The real concern is the condition and future quantity of our natural waters: therefore we must protect them and be mindful of what we let down the drain and how we conserve this resource - at home and at work.



Did you know? One person uses 40 liters of water per day, in average, just to flush the toilets... and we haven't even touched other water use (like washing dishes, cleaning and bathing). You can also reduce the used water quantity by placing a water displacement object in the toilet tank, such as a water bottle, and there are already toilets, where it is a built-in feature, and there are also ones, where the sink water used for flushing the toilet.

GREASE PLUG A.K.A. "FATBERG"... The drain is not a trash can, nor is it an all-absorbing miraculous structure. Outside the intended use, other materials (such as wet wipes, washcloth, food waste) must not be put into the sewer system.

FATBERG... Even biodegradable wipes can easily cause clogging because wastewater reaches the treatment plant in an average of 6 hours, in good case, whereas the disintegration of wipes takes usually one to two years. Take care of the integrity of the system!

What can you do?

DID YOU KNOW, THAT IN GREECE YOU MUST NOT THROW EVEN THE TOILET PAPER TO THE TOILET?

- Don't let the water run, close the tap even when you are brushing your teeth!
- Collect the reusable grey water and use it! (flush toilets, cleaning)
- Take a shower instead of taking a bath!
- Only start your dishwasher when it is necessary and is full you can save energy and water if you do so!
- Don't wash recyclable waste with clean water, rather use the water in dishes waiting to be washed!
- Replace your toilet tank with a water-saving one!
- Collect rainwater! It is good for your flowers, if you water them with it.
- Water prudently! Ground cover, e.g. with mulch, protects plants from drying out therefore they will need less water. Or water with drip irrigation system, so you can grow your plants more efficiently with much less water.
- Drink tap water, soda-water and use water bottles. Bottled water and soft drinks have serious environmental impacts.



WATER FOOTPRINT

We often don't think it over, that the water usage is linked to our diet, i.e. there are water-demanding and less water demanding foods. If the food/ ingredient comes from a distant country, where the drought is characteristic, we can be sure, that a lot of water was used to get them to your table. Some shocking data...

The more processed the product, the higher the water consumption. Think about the potato chips: the potato is irrigated, transported, processed and transported again, and finally we take it home from the shop and eat them.



1kg beef 15000 liter

1 cup pf coffee 140 liter



100g chocolate

1 egg 135 liter



bread loaf 900 liter



1kg chicken meat 4300 liter



half kg cheese

1 tomato 13 liter

WATER USAGE IN CASE OF DIFFERENT FOODS

What can you do? HOW TO REDUCE YOUR FOOD-RELATED WATER FOOTPRINT?

• Choose local ingredients - each kilometer taken requires about 2 liters of water (which is a consequence of fuel consumption)

• Consume more vegetable instead of meat-vegetables have much less water demand, than meats (animal feed production, watering, water for livestock, water for processing, packaging, transport)

• Look for plants, that require less water – for example, in the case of plant milks, the oat milk would be a better choice, than almond, considering, that the latter is very water-intensive plant

• Make your own snack – in the case of chips, if we make it, it requires less water, less transportation and no need for packaging. Even better, when you use your own potatoes for it.

• Grow your own vegetables and water with a drip irrigation





RIVER-FRIENDLY

RIVER-FRIENDLY AND RIVER-SAVING CATERING

To protect our waters, we must ensure that any activity near water has as little negative impact on the environment as possible. We are the guests at our living waters, so we would like to offer a concept to the catering establishments in these areas about making their operations river-friendly or even river-saver.

This concept is not only about protecting our environment, but also about learning about our waters and keeping ourselves healthy.

The qualification has four levels depending on the commitment of the venue towards the protection of the environment. For the rating, we created a system of criteria around three principles, thatassesses the restaurant's activities from the perspective of the river and makes recommendations on waste management, water use and the adoption of the riverbank at the venue.

>>DON'T POLLUTE THE RIVERS!

To reduce waste in our rivers, it is also worth reducing waste in catering units, avoiding disposable, low-quality items and packaging materials as much as possible. If this type of waste does occur, make sure it is placed in the correct bin or collection point. It is also the responsibility of the restaurant to sensitize its visitors to this issue. The cleanliness of our water should also be considered when using cleaning products, and only gentle cleaning agents should be used in restaurants.

>> Meeting the minimum, obligatory criteria means the RIVER-FRIENDLY* qualification, while meeting further, extra criteria the venue can earn the RIVER-FRIENDLY** mark!

Principle #3 >>HELP_THE_WILDLIFE!

Principle #2 >> CLEAN THE RIVER!

The owner of the restaurant adopts the riverbank and ensures its continuous cleaning. He/she also involves his guests, providing them with bags and gloves, and he/she transfers the collected litter in a professional way, even sorted to recyclable fractions. It is not only worth cleaning the river, but also getting to know it and promoting its curiosities, thus sensitizing visitors to the importance of river protection.

We are the guests along our rivers and living waters, so in addition to our presence, we are also there to protect and help the local wildlife. The owner will ensure that he or she plants native trees and flowers that provide insect and other animals with shelter and feed. Because of increasing droughts, they also ensure continuous irrigation by collecting rainwater where possible. To reduce waste in the restaurant, organic waste is composted to feed the land.

>> If the venue works actively for the river based on the last two principles, it gets the RIVER-SAVER*** mark, while in case the kitchen is also environmental friendly and meets the Sustainable Restaurant certification by the Heroes of Responsible Dining initiative, then it deserves the RIVER-SAVER**** mark!

The restaurant that meets the above criteria will receive the certification and the accompanying plaque made of river plastic and driftwood, and its profile will be displayed on the Clean Tisza Map and the Heroes of Responsible Dining app. In addition, in return for the measures put in place, the restaurant will receive promotion, for example in the form of articles about the restaurants on the Plastic Cup platforms and the Heroes of Responsible Dining blog, and joint campaigns, press releases, venue recommendations for events and possible discounts are planned.

Guests can leave satisfied with a much more complex experience and while entertained they can do something good, even just by choosing a restaurant with this certification. With this, we are also doing a lot to protect our environment, and the guest can rate the place themselves, and if they feel it does not meet the criteria for river protection, they can report it using the QR code at the place.

Plastic Cup and its partners also provide support for the development of RIVER-FRIENDLY and RIVER-SAVER Catering, both in terms of knowledge material and tools (like marketing tools), to make and keep our rivers clean.

>> Would you like to visit one of these restaurants or buffets? Or would you be a restaurateur who would like to apply for this certificate? Look out for details of the program coming soon on the Plastic Cup online platform! <u>https://petkupa.hu/eng/</u>

>NATURALLY - THERE ARE ALTERNATIVES!



What no one likes but must: cleaning.

Of course, it is necessary, but with a little attention our homes and offices can be clean and shiny sparingly. How should we start? It's worth paying attention, already at purchasing, what and how we want to keep clean. Luckily today along to the old classics (vinegar, washing soda, citric acid) we can buy environmentally friendly cleaning products, too. So:

>> Substitute the cleaning chemicals with natural products!

>> Look for eco-labelled products!

>> Consider, that if we clean with a hazardous substance, it will end up in the drains, polluting the sewer system and living waters!

>> Only hire cleaning companies that guarantee using eco-friendly products and treat the selectively collected waste properly.



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NATURAL CLEANING PRODUCTS GUIDE

Just because something is based on natural ingredients, doesn't mean it can't be dangerous! Mixing different natural substances can also release gases that can be harmful to your body, so always check what you should use and how. Also, just because it's a natural cleaner, it doesn't mean you can pour it directly into nature!

	ALCOHOL	CITRIC ACID	ACETIC ACID	OX BAIL SOAP	WASHING NUTS	LAUNDRY SOAP	WASHING SODA	SODIUM PERCARBONATE	BAKING SOD
WASHING					\checkmark				
INSING		\checkmark	 Image: A start of the start of						
BLEACHING							√ √		 Image: A start of the start of
STAIN REMOVAL	wine stain, ba ll pen ink			blood stain, grease stain, oil stain, pooped diaper, dried stain		grease stain	grease stain, grass stain (color test recommended)	other stain (color test recommended)	
DEGREASING	\checkmark		<						
SCRUBBING									
WINDOW CLEANING	 Image: A start of the start of	 Image: A start of the start of	<						
DESCALING			√ √						 Image: A start of the start of
COFFEE MAKER DESCALING		 Image: A start of the start of	never						
MOLD REMOVAL			√ √					I	
DEODORIZATION									

BUY CONSCIOUSLY!

It is important to be aware and conscious when shopping, so that we can save ourselves from a lot of unnecessary items/packaging. Here are some tips:

A SLIP OF PAPER

Prepare in advance for shopping: gather what we need in a calm environment and write it down to a piece of paper or into our phone. It is worth to think in advance for more days thus reduce the CO2 emission of getting to the shop. Basic rule: Do not go shopping hungry, because you will easily forget about the list!

YOUR OWN BAG OR BASKET

It is worth to keep an extra shopping bag in our handbag, you never know... When it happened, that you do not have a bag with you, look around in the shop for an empty cardboard box to hold your bought items. Always ask if you can take it away, some types of boxes are also charged to the shops. You can also use this cardboard as a selective waste collector, so you don't need to buy a separate bin for your home.

 >> Making a curtain bag: https://www.youtube.com/watch?v=swPrYNu1kGM_
 >> Making a T-shirt bag: https://www.youtube.com/watch?v=DesGx5lpMWQ





> HINT

Make your own bag from an unused curtain or T-shirt. Surely there is somewhere a curtain put aside or n unused T-shirt, make it useful, give them new life!



BUY LOCALLY!

Search for local farmers, shops in your neighborhood or even on the internet! It is worth to visit the local market, you can buy a lot of products from the region. Do not forget to take the bags and sacks! If you have a garden or a terrace at home, you can grow plant for your own.







READ THE LABELS!

Eco-labelled products are packaged in reusable or recyclable material or are produced in an environmentally friendly manner. There are even more and more new labels, some of them are created and used by the manufacturer itself. It is important, that if you don't know a label, look it up!



Shopping is your choice - You decide what you need and who and what you support with your wallet, also. Don't fund environmental pollution, chemicalization, child labor, mass production of harmful and unnecessary things.

Garage sales are becoming more and more common, so it's a good idea to get the items you need from these places, but you can also get rid of your own unnecessary items in the same way.

LOOK FOR THE ORIGINAL AND FRESH!

Local products are always better! Believe us, the fruitiest, freshest, most environment friendly is to choose the local fruits and vegetables that are not packaged and treated with chemicals, to prevent spoilage during the transportation. Always check the origin!

YOU ARE WHAT YOU EAT, THEREFORE

- The best is, if everyone serves themselves as much and as many times as they consume!
- Untouched leftovers can be used again

• Consume locally grown (organic) vegetables, fruits and pickles, juices made of them, if available, thus strengthening your immune system. If you participate in "Pick your own..." activities you'll get fresh goods and participate in a great community program, too...

• If you can, preserve these yourself! With a little energy investment, you can store all your seasonal fruit and vegetables for the winter, and there are lots of ways to do it – we can dry, pickle, steam, pasteurize. But it's important to check what you have to pay attention to at which method, to avoid throwing away several jars of peach jam because they have gone moldy... The safest and simplest method is drying, with proper storage you can store them practically indefinitely.

• Take your snacks and lunch in your own (glass) containers. Try to avoid heating up food in plastic containers.



>HINT

If you take part a "Pick your own…" event, always check, how you can pick a given fruit and vegetable accurately, how you have to take care not to harm the plant, that it will be able to bring more growth in the harvest season.

SHOW ME YOUR GARBAGE AND I WILL TELL WHAT YOU ARE

At first, let's clear two important definitions, which are used as synonyms in the everyday language:



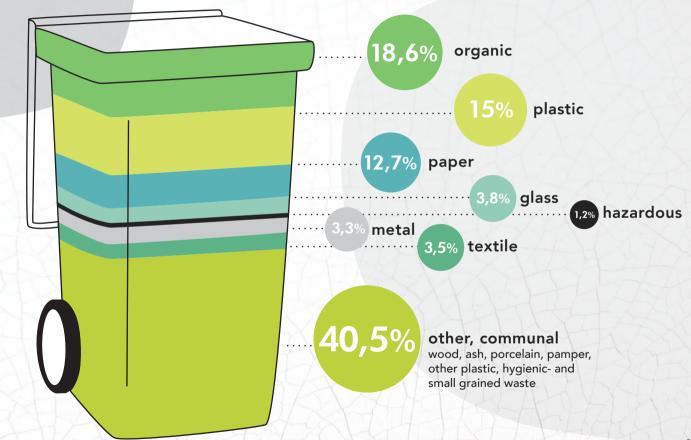
GARBAGE

Useless material that the owner cannot or does not want to use anymore. Garbage is removed from the economic cycle and ends up mixed and contaminated at landfills or in incinerators.

WASTE

A material (resource) that has become useless at source but can be recycled as a secondary raw material collected and treated separately by type of substance. In Hungary, for instance, garden benches, insulation material, car parts, recycled bottles, office paper, cardboard furniture and many other useful and designer things are made of these.

THE COMPOSITION OF THE CONTENTS OF AN AVERAGE BIN





If we look at it closely, we can see that with proper sorting, we can reduce the amount of rubbish by up to 30%. In fact, by composting we can reduce it by up to 30%, again. There are already many good, odorless solutions for home composting, not to mention garden composters. But it is important to check the rules of composting.

Even more important than managing our waste is preventing its creation! After all, the best waste is the waste that is not produced. But how do we get started on this journey?

>> SET REALISTIC GOALS! – You will not be a "zero waste hero" from tomorrow, but you can plan your route to get there in one or two years.

- >> AVOID SINGLE USE OBJECTS!
- >> Make your own bag/sack and do not forget to take them with you!

>> PREPARE IT AT HOME! It is worth to eat as much of your own food as possible, so you don't by unnecessary packaging (e.g. plastic/paper box of the ready-to-eat meals, plastic packaging of rice pudding).

>> SHARE IT WITH SOMEBODY – If you have made too much food, and you realize that it will not eat it up, ask your friends, neighbors, colleagues, classmates, if they would like to take it over from you. There's no shame in offering and no shame in accepting!

> HINT

Empty your bin and see what you can find in it, study what improvements you can make in your household to reduce waste. Pay attention to hygiene too, wear gloves!

9R FOR A CLEANER ENVIRONMENT!

With the help of the **"9R**" we can think over what we can do ourselves, what we need to look out for in order to reduce the contents of our bins and thus our ecological footprint.

3.

. RETHINK

Believe us, there is always an other, better solution to a problem that is less damaging to the environment. It's never too late to rethink your habits, your consumption, where you can save time and money, and have a sense of achievement. A good way is for this to keep track of your monthly spending, follow your bank account - and see how we can reduce your spending.

REFUSE

YOU DO NOT HAVE TO ACCEPT, WHAT YOU DO NOT AGREE WITH.

This means a clear message that you disagree with a particular service/product. This could be a leaflet, plastic bag, straw, refusal of a free promotional gift. Believe me, good examples are sticky! You will have more and more success and followers when they see that there are other ways to live a quality life. For example, you can put a note on your mailbox with "No flyers!" because you know it will end up in the trash anyway. Paper-based discount booklets and leaflets are now easily can be viewed via apps, but beware of tempting offers! Before you decide, make sure you really need it!

REDUCE USE LESS MATERIAL, OBJECT, RESOURCE! SMALL IS BEAUTIFUL!

If we reduce and optimize our consumption and use less, only the necessary amount of resources we immediately lower the amount of trash we produce. In fact with this we even save money! Do with less, enrich with quality! 4.

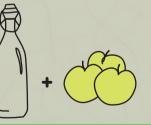
REPLACE

CHANGE FROM A PRODUCT OR SERVICE TO A MORE ENVIRON-MENTALLY FRIENDLY, LOW-IMPACT SOLUTION!

Renting could be a good alternative instead of buying something that we couldn't use to its fullest potential. In fact, products in many cases can be replaced by a service (using a shared car service instead of owning a car). We can replace products that have high environmental impact with environmentally friendly alternatives: for instance, use cleaning products made of natural ingredients (vinegar, baking soda, citric acid).

Today, you can find a greener solution in all services, for example: a beautician who uses washable cloths and natural materials, a car rental service where you can rent electric cars only, or a restaurant where you can ask for takeaway food in your own box.





5. REUSE

With a little creativity you can use things, you no longer need, for other purposes without spending money. Just think about a mustard jar which when empty could serve as a regular glass or a pencil case.

> HINT

You can make lots of great useful objects from scrap or unused items, it's worth looking online for ideas. It is sure you have friends, family or colleagues who would also like to join in a joint creation, invite them too, it will be an unforgettable memory.

What can you do?

BE CREATIVE AND ECONOMICAL AT WORK AND SCHOOL, TOO! HOW?

- By purchasing and replacing refillable toner cartridges.
- Your own mug, glass has not only a fond memory but a more hygienic and environmentally friendly option to a single use cup.
- We can take notes on the empty side of a used paper. Don't throw away paper with one side used only, reuse them!
- Offer redundant but workable electrical and electronic devices to organizations that can still use them or take them to a selective waste collecting site.

DID YOU KNOW THAT PRECIOUS METALS ARE FOUND IN THE ELECTRONIC WASTE?

And by reusing them, we help the environment. Unfortunately, it is still very difficult to recover these materials from unused, unwanted items. In order to increase efficiency, the subsequent processing of products should be an important aspect of product design.

USELESS FOR YOU, TREASURE FOR SOMEONE ELSE.

Whenever possible fix it or get it repaired or send it to companies that will repair and resell them. They can be disposed at shops selling these kinds of items or at recycling centers, from where they are passed on to businesses where they are dismantled, reusable parts are separated, and the remainder is recycled. See for yourself: Visit such recycling centers, the open days are very instructive!

• Donations are received by churches, civic charities and organizations, who then distribute them to the needy and network of fundraising organizations, which also collects and donates reusable items.

• An in-house "swap party" can be a solution, where you can exchange school supplies, ski equipment, gifts, clothes, bottles, beach equipment, children's stuff – because "it will be good for someone else".

There are also so-called "zero waste" online groups where you can upload unused items and donate them. If there is no such group in your municipality, YOU should set one up!

• There can also be a courtesy or donation shelf in the workplace, with books, small items, household items - so it doesn't end up in the trash.

• If you have absolutely no idea, take it to waste centers, but at least wait for the next house clearance event, the date of which the public service provider will provide information in time.



7. ROT COMPOST, COLLECT SEPARATELY AND MAKE USEFUL IT ON THE SPOT!

Believe it or not, you can compost even at home, in your kitchen. We don't live in our offices 24/7 but even there we generate organic waste. Collecting this separately could be used there or at home. This reduces waste on the one hand and could do some good to the office plants on the other hand. It's all just a matter of making a decision and staying consistent. Collecting separately the greens could reduce your household waste by two-thirds.



You might not have to buy a new one - with a little cooperation, interest and free time, lots of things could be fixed. You might find out about hidden talents of your colleagues if you can't manage on your own. It shouldn't be overlooked that fixing something or a DIY project can bring pleasure and success - just try it.

There are already workshops set up specially for this purpose, and where you can ask a specialist for help to solve the problem.



What can you do? WHAT CAN WE COMPOST?

From the kitchen and around the house:

- Waste of vegetable, coffee grounds and tea leafs, decayed flowers;
- Faeces of herbivorous pets with woodchips, feathers, hair;
- Paper (tissue paper, cut egg carton), wool, cotton and linen textiles (well cut up to pieces).

From the garden:

- Cut grass, garden weeds (in pre-bloom state)
- Tree leaves, straw, chopped branches, twigs, withered flowers, stems of vegetables, fallen fruits.

TRY IT OUT! Before making your own compost, be sure to read up on what to look out for (e.g. moisture) as it will be a community of living organs.



RECYCLE COLLECT YOUR TRASH SEPARATELY AND RECYCLE IT

• The opportunity is there - the recycling bins are in the offices, schools, homes. Before throwing out anything check whether they are clean of leftovers and stains.

Did you know that the selective waste sorted by hand in some cases? Be empathetic and help them by rinsing your waste and making sure you only put what you want in the bin.

• Don't put oily papers and pizza boxes in the paper recycling bin

- they cannot be processed and should be placed in the mixed trash. Squeeze plastic bottles and tin cans before putting them into the bin, it saves space and allows more waste to fit in the collector.

Imagine what it would be like to transport your beach mattress inflated in the car. Not too many passengers and stuff would fit next to it. It's the same with a garbage truck, flatten things out to fit lots of bottles in a small space!

• It is even better if you unscrew and collect the plastic lids as you can support good causes with them such as a medical treatment, environmental protection activities, or join a campaign of a kindergarten or a school.

• It is often not easy to find the road in the mysteries of selective waste collection. It's always worth checking local rules because they can vary from country to country, municipality to municipality, district to district.

9. RE-ACT

Don't pass by environmental pollution without a word! Speak up, have suggestions and set a good example for your word around you! There are more and more volunteering program that you can join, or you can organize them yourself. With the help of social networking sites, you can easily advertise it. It's important to always liaise with local authorities, e.g. if you want to plant a tree in a public area, check it with the municipality.

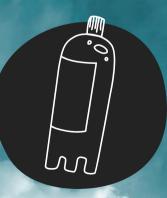
YOU ARE NOT ALONE! Participating in these kinds of activities is not only good for the environment, but also for your souls, as you can meet more environmental "warriors" and can realize that you are not alone.

If you want to raise awareness about environmental protection, be empathetic, listen to the arguments against it, get to know their motivation and try to convince them. If we communicate aggressively, it will never end well. He may not agree with you immediately, but believe us, you have planted a seed in his mind.

What can you do? ON DEDICATED DAYS AND BEYOND

- Be a volunteer and help the work of civil organizations!
- Become a "plastic pirate" and participate in river cleaning efforts of Plastic Cup!
- Be a conscious consumer, use the opportunity be picky!
- Take a holiday in your home country! We bet you haven't been to a lot of places in the country.

• Commercials manipulate - don't let yourself be fooled, resist promotions. Don't fall for it because your bank account will...



HOW WE MANAGE ENERGY?

Let's start with energy that keeps everything moving. Our energy consumption is a big slice in our climate change pie and the largest component of the previously mentioned ecological footprint is the fossil fuel consumption (in developed countries). Our job is twofold: we need to be more prudent with our consumption and we need to use renewable energy in a larger share.

> HINT

Our energy consumption has increased for several reasons, despite the fact that we are using more and more energy-efficient devices in many cases! For example, we are using more and more devices that require electricity. It's worth thinking about what devices we plugged in 30 years ago, which task required electricity and which requires now. On the other hand, there are many more of us, 8 billion people want access to the electricity now, whereas in 2000 "only" 6 billion people lived on the planet.

What can you do?

- Switch off your electric, electronic equipment when they are not in use!
- Use energy saving LED bulbs!
- A laptop uses less energy than a PC. If you need a new one, opt for an energy saving laptop!
- Less gadget, less energy: pass on what you don't use!
- Use motion sensing solar lamps!
- Install a solar panel, a solar collector or a wind wheel!
- Heat smartly! You can tailor your heating to your lifestyle with smart solutions: there are mobile, foldable solar panels - on the go or when hiking you can still charge without network and dress warm instead of heating!
 - Did you know that the ideal temperature in the office is 18-21 C, and at night it's enough to keep the building at 15 C.? The average temperature we set the heating in our homes varies from country to country, for example in the Netherlands the average indoor temperature is 18 degrees.
- If possible avoid using the air conditioner! Use a fan instead, you can access it anytime, anywhere!
 - Did you knowthat when you use air conditioning, you shouldn't set the difference between the indoor and outdoor temperature to more than 5 degrees
 - because it can have a serious impact on your health and your body?
 - If possible avoid using batteries and accumulators! If unavoidable use rechargeable ones!



TRAVEL ECO-FRIENDLY

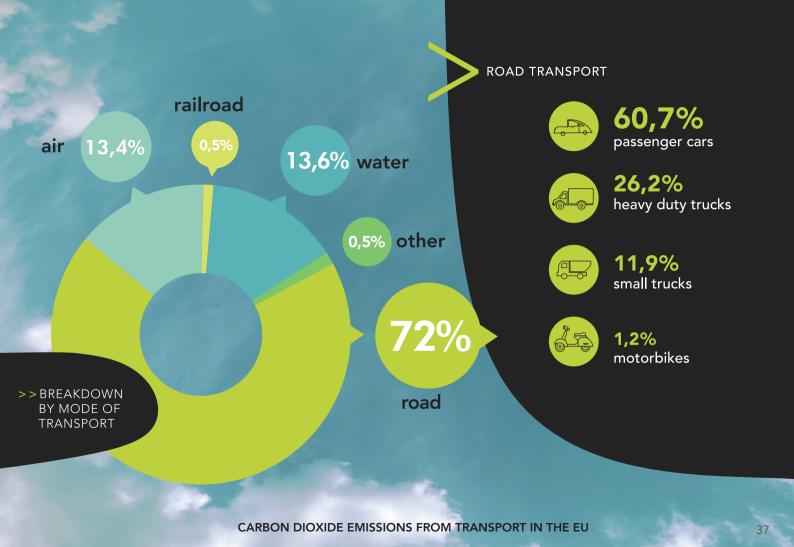
We are all in motion, on the go - but it makes a difference how we do that. Transportation is responsible for nearly one third of the carbon dioxide emission caused by human activities. This includes transportation getting to a vacation, going shopping and to work. It should be noted that passenger cars are the most polluting, they are responsible for 60,7 percent of the carbon dioxide emitted on the European roads.

ONE CAR, BUT HOW MANY PASSENGERS?

In Europe, on average, one car only carries 1.7 passengers whereas more passengers would mean less cars, thus less fuel, traffic and air pollution resulting a lower number of illnesses.

> HINT

>> Ask your neighbor, colleague or friend nearby where he or she goes in the morning to see if you can organize your transport together. >> If you can, choose a bike! We live increasingly sedentary lives, and cycling is not only good for the environment, but also for your health.



What can you do? COUPLE OF TIPS HOW TO BE ENVIRONMENTALLY CONSCIOUS ON THE ROAD:

- Scooters are trendy, and if you get tired you can just fold it up and jump on a bus.
- If you are travelling afar, try a carpooling service (like i.e. Motar: www.motar.eu)
- String up your to-do list, hit more birds with one stone and you'll even save time.
- Choose items that are transported from your home country or a neighboring country, so that they emit much less CO2.
- Avoid cheap, poor-quality gadgets. They usually either end up as a junk in our household or they break down after a few uses because of their quality. And the process of manufacturing and transporting them produces the same CO2 emissions.
 - Your legs are always at hand. Walking makes you experience more, gets you to places faster and makes you healthy.



GREENER IN GREEN

Some tips for living in a greener environment:

>> Green plants and flowers are the place for birds, it is important to take care of them even in winter; it is worth placing bird feeders, seeds, feeding balls for them.

>> In the summer, we can also treat useful organisms and pollinating insects with a small insect hotel.

>> Where possible, organize a community tree planting, reminiscent, for example, of a significant occasion or anniversary, or linked to a significant event at the company.

> HINT It is a custom in more and more towns and cities to plant a tree in honor of newborn babies. If it is not yet a tradition in your municipality, try to propose this idea to the local authorities.

>> Trees that provide shade produce oxygen and temper the local climate - pay attention to their care, we can even express a company's commitment through "adoption" (care, nursing).

> HINT You can't start early enough... Join the international organization Plant-For-the-Planet, founded by a 9-year-old boy to plant more trees. <u>https://www1.plant-for-the-planet.org/</u>

>> It is worth creating even a small spice garden, and with its growth you can add flavor and color to the meal.

> HINT There







HAVE YOU EVER HEARD OF FOREST BATHING?

Nature is the natural habitat of humans, so it's no wonder that after a hike or a trekking tour, despite the fatigue, we feel recharged. It's worth visiting the nearby forests regularly and observing what sounds we hear, what smells we smell, what animal tracks we see.

WHERE AM I, WHAT CAN I DO? – CHECKLIST

We've put together a list of things you can do in your immediate environment to find out what you could do, where there is room for improvement:

>> SUBJECT	>> HINT	>> TO DO	>> DUE DATE
DOORS & WINDOWS	Replacing and repairing windows and doors requires a larger investment, but it is worth investing because heating can lose a lot of heat through old, antiquated win- dows and doors. If you do not have sufficient financial resources, it is worth reducing heat loss with curtains, insulation material and carpets.		
WATER USAGE - COLLECTION	Every drop is a treasure. It's worth checking that all the taps close properly and that there are no leaks. When flushing toilets, make sure you use just as much water as you need. If you have water left over in your canteen or jug, use it to water the plants instead of spilling it. It is also worth collecting water during heavy rainfall, as it is becoming increasingly common for a month's worth to fall suddenly after a long drought. There are special tools for this, but an old barrel can also do the job.		
WASTE REDUCTION	Prevention is more important than waste separation. It is worth thinking together with the other building users about where we can reduce waste. For example: using your own mugs, even for tea bought from the canteen, selling glass-bottled soft drinks (and ensure the recycling), recycling paper waste, etc. As a starting point, it is worth looking in the rubbish bin to see what waste is there.	RA.	PAL
	ANT HINK		41

>> SUBJECT >> HINT

>> TO DO

>> DUE DATE

rem 42

It does matter how we cover the distance between our homes and institutions (school, municipality, workplace), and we can do a lot to optimize it here too. If you can, you should get on our bikes. If you can't do this, avoid driving a 5-person car alone, try to fill it up with colleagues or neighbors who are going in the same direction. Public transport is an easy way to get around in larger cities. Workplaces and schools can build up their own assets for this.
The range of composters is expanding year by year, and there are already many indoor and outdoor solutions. You can make your own as a team builder or buy a ready-made solution. Your first task is to find the right place and choose a com- poster accordingly. The compost soil/tea can either be given to the plants on site, or workers and students can take it home.
Collectors for selecting are easy to buy, but you can also make your own by recy- cling your own waste. Creative solutions can even take the form of a competition. In this way, students and staff in the same building will have a different attitude towards these bins. Make sure that the correct collection procedure will be well documented on posters.
If you are about to renovate or build, there are plenty of options for sustainable solutions. It's essential to have a good designer who can save us a lot of money with his experience and a little research.
It is also worth choosing sustainability and environmental protection as a theme for various team-building activities. It is also worthwhile to involve different organizations that are more knowledgeable on the subject, and we can support the organization with the services they provide. Such actions could be: litter picking, tree planting, "PET piracy", craft recycling (auction of made items, donating money to organizations), visiting sorting plant/working in it, food distribution, etc.

>> SUBJECT

>> HINT

>> TO DO

>> DUE DATE

INVESTIGATE SUPPLIERS

To run any institution, you need suppliers and subcontractors. We can do a lot for our environment by choosing the greenest, most sustainable one. E.g.: use the services of a server park that uses renewable energy for its operations and/ or uses an electric car for delivery (charged with renewable energy) and/or contracts with a company that is carbon neutral and/or uses recycled materials for its products.

CATERING

We can also save a lot of waste and energy in office and school catering. When preparing food, using local and seasonal ingredients is an important aspect. It's worth picking or buying as much as you're sure to eat. We can manage leftovers in accordance with local legislation, so be sure to find a useful place for them. This could be giving it to people in need, feeding animals, etc. There are more and more companies and start-ups specialized in this fields, who can help.

ESTABLISHING A REWARD SYSTEM

People like to be rewarded and, more importantly, it is motivating them. It is therefore worthwhile to set up different reward systems to make employees, students proactive. To come up with a reward system, always look at what motivates the group - it could be a cash reward, a pride wall, badges, rank, etc.

MY OWN IDEAS



BE ALWAYS INFORMED!

With ongoing research and development, it's always worth keeping up with green news. With more and more emphasis being placed on this worldwide every year, it's easy to see that a problem could have a good, sustainable solution in a few months' time.

More information about the SDG's: >



SUSTAINABLE DEVELOPMENT GOALS

In order to live a sustainable life around the world, the United Nations has put together a list of goals, known as the SDGs, to help us decide what we need to improve in our environment.

GREEN CALENDAR

The green calendar helps us to look after our environment all year round. Special days are also a good opportunity to involve our environment in different activities, such as litter picking, tree planting, etc.

01.02.	02.02.	01.03.	03.03.	05.03.	18.03.
TISZA WILDLIFE REMEMBRANCE DAY	WORLD WETLANDS DAY	RECYCLED PAPER DAY	WORLD WILDLIFE DAY	INTERNATIONAL DAY OF ENERGY EFFICIENCY	GLOBAL RECYCLING DAY
21.03.	22.03.	23.03.	LAST SATURDAY OF MARCH	22.04.	LAST WEDNESDAY OF APRIL
INTERNATIONAL DAY OF FORESTS	WORLD WATER DAY	WORLD METEOROLOGICAL DAY	EARTH HOUR	EARTH DAY	INTERNATIONAL NOISE AWARENESS DAY
SECOND SATURDAY OF MAY	10.05.	15.05.	20.05.	22.05.	24.05.
WORLD FAIR TRADE DAY	BIRDS AND TREES DAY	WORLD CLIMATE CHANGE DAY	WORLD BEE DAY	INTERNATIONAL DAY FOR BIOLOGICAL DIVERSITY	EUROPEAN DAY OF PARKS

05.06	. 08.06.	09.06.	SECOND MONDAY OF JUNE	17.06.	29.06.
WORLD ENVIRONMENT DAY	WORLD OCEANS DAY	EMPTY CLASSROOM DAY	WORLD MEAT FREE DAY	WORLD DAY TO COMBAT DESERTIFICATION AND DROUGHT	INTERNATIONAL DANUBE DAY
07.03 INTERNATIONAL PLASTIC BAG FREE DAY	OVERSHOOT DAY	0109. 08. UPPER TISZA PLASTIC CUP	SEPTEMI INTERNATIONAL NATUR FESTIVAL GÖDÖLLŐ, WEEK OF NATIONAL PA	RE FILM	HIRD ATURDAY F SEPTEMBER
16.09.	1622. 09.	22.09.	30.09.	04.10.	10.10.
WORLD OZONE DAY	EUROPEAN	WORLD CAR FREE DAY	PACKAGE FREE DAY	WORLD ANIMALS DAY	DAY OF COMPOSTING
24.10.	01.11.	05.12.	05.12.	29.12.	谷民
INTERNATIONAL DAY OF CLIMATE ACTION		INTERNATIONAL VOLUNTEER DAY	WORLD SOIL DAY	INTERNATIONAL DAY FOR BIOLOGICAL DIVERSITY	TAX

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THESE ARE ALREADY WORKING

To make it easier to find greener solutions, we've put together a range of useful services:

>WASTE MANAGEMENT

PAPER WASTE

fegroup.hu megoldaskft.hu www.inest.hu dunarecycling.hu www.nagyeshettichkft.hu www.iratmentes.hu

TREATMENT AND COLLECTING OF OLD TIRES

www.duna-drava.hu www.ecomissiokft.hu

COLLECTING WASTE OIL biofilter.hu mol.hu gegol.hu

COLLECTING FOOD WASTE

www.atevszolg.hu envirotis.hu

INDOOR COMPOSTING

COLLECTING HAZARDOUS WASTE

www.aksd.hu www.trans-global.hu www.emkkft.hu

SERVICES RELATED TO PLASTIC WASTE REDUCTION

WATER PURIFIERS www.viztisztitomarket.hu www.bwt.com/hu-hu www.vizetiszom.hu

DELIVERY IN METAL BOXES www.rakun.hu

ZERO WASTE SHOPS

hulladekmentes.hu csomagolasmentes.hu tebe.hu

AVOIDING CHEMICALS

mosomami.hu hu.cycle.bio zerowastestore.com cleaneco.hu

SUSTAINABLE CLOTHES, ACCESSORIES

printa.hu www.oatava.com rethy-fashion.com philomen.eu www.wyhoys.com nesshoes.com jannjune.com www.cimbi.net/en www.docean.com www.plantethics.eu www.cirrhopp.com uny-versum.com

>RENEWAL ENERGY

SOLAR PANEL

platiosolar.com solarexpress.hu wagnersolar.hu www.tesla.com/solarroof

WIND TURBINE

www.szelturbina.com

WATER TURBINE

www.xylem.com/en-us www.chinahydrogenerator.com www.waterlilyturbine.com www.energynomad.com

ALTERNATIVE TRANSPORT

molbubi.hu/hu www.mollimo.hu tanulobicikli.hu greengo.com electricbrands.de/en sonomotors.com izera.com www.bird.com www.li.me blinkee.city

> Companies supporting recycling

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CONNECTIONS, WHEN YOU THINK IN CIRCLES:

rethink-resource.com

FOOD-SAVING: trjfp.com

BY-PRODUCT RECOVERY: www.lifecitrus.eu/index.php/en

SMART WASTE COLLECTION: enevo.com

WASHMACHINE RENTING: bundles.nl

DEAD OIL, FOOD WASTE: biofilter.hu

PLASTIC RECYCLING: www.miniwiz.com

RAW MATERIAL FROM LEFTOVER MATERIAL: www.grapoila.hu

RECYCLING: www.terracycle.com/en-US

SOIL NUTRIENT REFILL: mastergood.hu

ORGANISATIONS TO JOIN AS A VOLUNTEER

www.worldwildlife.org www1.plant-for-the-planet.org petkupa.hu/hu_HU foodnotbombs.net www.unv.org www.janegoodall.org www.greenpeace.org published by: Hungarian Association of Environmental Enterprises

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